003330 P01 USA/ETCH/METAL/MD Application No: 10/824,123 Page 2 of 15

IN THE CLAIMS:

Please substitute the following claims for the previous claims:

- (Currently Amended) A substrate processing chamber component capable of being exposed to a plasma in a process chamber, the component comprising:
 - (a) a substrate processing chamber component structure; and
- (b) an electroplated coating on the substrate processing chamber component structure, the electroplated coating comprising yttrium-containing species, and the electroplated coating formed by:
- (i) immersing the surface of the component structure in an electroplating bath comprising a solution of yttrium species;
- (ii) connecting the component structure to a negative terminal of a voltage source; and
- (iii) connecting an anode immersed in the bath to a positive terminal of the voltage source.
- 2. (Original) A component according to claim 1 wherein the yttriumcontaining species comprises one or more of elemental yttrium and yttrium oxide.
- (Original) A component according to claim 1 wherein the yttriumcontaining species comprises yttrium oxide, and wherein the electroplated coating further comprises aluminum oxide or zirconium oxide.
- (Previously Presented) A component according to claim 3 wherein the electroplated coating comprises a compound comprising yttrium oxide and aluminum oxide.

4155388380

003330 P01 USA/ETCH/METAL/MD Application No: 10/824,123 Page 3 of 15

- (Original) A component according to claim 3 wherein the 5. electroplated coating comprises partially stabilized zirconium oxide.
- (Original) A component according to claim 1 wherein the 6. electroplated coating comprises a thickness having a gradually changing concentration of the yttrium-containing species therethrough.
 - (Currently Amended) A substrate processing chamber comprising: 7.
 - a wall around a process zone; (a)
 - a substrate support in the process zone; (b)
 - a ring about the substrate; (c)
 - (d) a gas distributor;
 - a gas energizer; and (e)
 - (f) a gas exhaust port,

wherein at least one of the wall, substrate support, ring, or gas distributor, comprises a component capable of being exposed to a plasma in a process chamber, the component comprising a structure having an electroplated coating comprising yttrium-containing species that is formed by:

immersing a surface of the structure in an **(i)** electroplating bath comprising an aqueous solution of vttrium species;

connecting the structure to a negative terminal of a (ii) voltage source; and

connecting an anode immersed in the bath to a (iii) positive terminal of the voltage source, and

whereby a substrate transported into the process chamber can be processed by a gas released by the gas distributor, energized by the gas energizer, and exhausted by the gas exhaust port.

003330 P01 USA/ETCH/METAL/MD Application No: 10/824,123 Page 4 of 15

- 8. (Previously Presented) A chamber according to claim 7 wherein the yttrium-containing species comprises one or more of elemental yttrium and yttrium oxide.
- 9. (Previously Presented) A chamber according to claim 7 wherein the yttrium-containing species comprises yttrium oxide, and wherein the electroplated coating further comprises aluminum oxide or zirconium oxide.
- 10. (Previously Presented) A chamber according to claim 7 wherein the electroplated coating comprises a compound comprising yttrium oxide and aluminum oxide.
- 11. (Previously Presented) A chamber according to claim 7 wherein the electroplated coating comprises partially stabilized zirconium oxide.
- 12. (Previously Presented) A chamber according to claim 7 wherein the electroplated coating comprises a thickness having a gradually changing concentration of the yttrium-containing species therethrough.

13 - 22. (Cancelled)

- 23. (Previously Presented) A component according to claim 1 wherein the electroplated coating comprises a thickness having a concentration gradient of yttrium therethrough.
- 24. (Previously Presented) A component according to claim 1 wherein the electroplated coating comprises a thickness having a concentration gradient of aluminum therethrough.

003330 P01 USA/ETCH/METAL/MD Application No: 10/824,123 Page 5 of 15

- 25. (Previously Presented) A component according to claim 1 wherein the electroplated coating is fabricated by annealing a first electroplated layer comprising aluminum or zirconium, and a second electroplated layer comprising yttrium.
- 26. (Previously Presented) A component according to claim 25 comprising annealing the layers to form oxidized species.
- 27. (Previously Presented) A component according to claim 1 wherein the electroplated coating is fabricated by electroplating a layer comprising a mixture of (i) yttrium and (ii) aluminum or zirconium onto the surface, and annealing the layer.
- 28. (New) A substrate processing chamber component capable of being exposed to a plasma in a process chamber, the component comprising:
 - (a) a substrate processing chamber component structure; and
- (b) an electroplated coating on the substrate processing chamber component structure, the electroplated coating comprising yttrium-containing species and partially stabilized zirconium oxide.
- (New) A component according to claim 28 wherein the yttriumcontaining species comprises one or more of elemental yttrium and yttrium oxide.
- 30. (New) A component according to claim 28 wherein the yttrium-containing species comprises yttrium oxide, and wherein the electroplated coating further comprises aluminum oxide.
- 31. (New) A component according to claim 28 wherein the electroplated coating comprises a compound comprising yttrium oxide and aluminum oxide.

4155388380

003330 P01 USA/ETCH/METAL/MD Application No: 10/824,123 Page 6 of 15

- (New) A component according to claim 28 wherein the 32. electroplated coating comprises a thickness having a gradually changing concentration of the yttrium-containing species therethrough.
- (New) A component according to claim 28 comprising a chamber wall, substrate support, ring, or gas distributor, of a process chamber.
- (New) A component according to claim 1 wherein the anode 34. comprises an inert material or the material to be electroplated.
- (New) A component according to claim 1 wherein the electroplating bath comprises a yttrium containing electrolyte.
- (New) A chamber according to claim 7 wherein the anode 36. comprises an inert material or the material to be electroplated.
- (New) A chamber according to claim 7 wherein the electroplating 37. bath comprises a yttrium containing electrolyte.